

## CLAIMS

What is claimed is:

1. A method for dynamically modifying a mark-up language document  
5 during runtime comprising the steps of:

a) providing an insertion tag for use in the mark-up language document;  
wherein the insertion tag specifies a location in the mark-up language document for  
inserting data that is unavailable when the mark-up language document is created;

b) receiving a mark-up language document that includes at least one set of  
10 insertion tags;

c) receiving data during run-time; and

d) dynamically modifying at run-time the mark-up language document with  
the received data.

2. The method of claim 1 wherein the step of dynamically  
modifying at run-time the mark-up language document with the received  
data includes the step of injecting the received data in the mark-up language  
document at the location specified by the insertion tags.

3. The method of claim 1 further comprising the step of:

e) using the received data in another portion of the mark-up  
language document.

4. The method of claim 1 wherein the mark-up language document is an  
25 XML document.

5. The method of claim 4 wherein the XML document is an XML test  
suite file.

6. The method of claim 1 wherein the step of dynamically modifying at run-time the mark-up language document with the received data includes the steps of

5 parsing the mark-up language document to generate a representation thereof; and  
modifying the representation with the received data.

7. The method of claim 6 wherein the step of modifying the  
10 representation with the received data includes the steps of  
creating a new node that includes the received data;  
adding the new node to the representation; and  
removing the insertion tag from the representation.

15 8. A method for dynamically modifying a mark-up language document during runtime comprising the steps of:

receiving a mark-up language document that includes at least one injection tag for specifying a location in the mark-up language document to inject information that is not known at the time that the mark-up language document is created;

20 generating a representation of the mark-up language document that includes a tree structure;

receiving information; and

injecting the information at the location specified by the injection tag.

25 9. The method of claim 8 wherein the step of injecting the information at the location specified by the injection tag includes

creating an actual response node;

populating the actual response node with information from the response;

adding the actual response node to the representation of the mark-up language document.

10. The method of claim 8 wherein the step of receiving  
5 information includes  
receiving information from a response during run-time.

11. The method of claim 8 wherein the step of injecting the  
information at the location specified by the injection tag includes  
10 injecting the received information into an internal representation of a  
mark-up document.

12. The method of claim 11 wherein the internal representation  
is one of a DOM representation, an XML tree, and other representations.

13. The method of claim 8 wherein the injected information is  
subsequently utilized during run-time as one of a part of a call and a part of a request.

14. The method of claim 13 wherein the request is a save request in  
20 UDDI.

15. A method for testing a Web server comprising the steps of:

a) generating a test suite file written in a markup language that includes at  
least one injection tag; and

25 b) at run-time receiving data that is unavailable when the test suite file is  
generated and modifying a representation of the test suite file with the received data.

16. The method of claim 15 further comprising the steps of:

c) using the received data in another portion of the test suite file.

17. A test infrastructure for interacting with a server that has capabilities comprising:

5 a) a test suite for use in testing the capabilities of the server; wherein the test suite includes an expected response for a first request and at least one reference to information not known to a tester when preparing the test suite; and

b) an injection module for receiving information from the server, for generating an actual response based on the received information, and for replacing  
10 the reference with a target in the actual response that is referenced by the reference.

18. The system of claim 17 further including:

c) a comparison module for comparing an actual response with an expected response.  
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19. The system of claim 17 further including:

a parser for receiving the test suite and generating a DOM representation of the test suite.

20. The system of claim 17 wherein the injection module further includes:

a node creator for creating a new node with the received information; and  
a node adder for adding the newly created node to a representation of the test suite.  
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